Applicants: John David Fraser, et al. Attorney Docket No.: 55503-002001 Client Ref. No.: MK504269-003

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#### **AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all prior versions and listings of claims in the application:

## Listing of claims:

- 1. (Cancelled)
- 2. (Currently Amended) A conjugate which comprises an antigen-presenting cell (APC) targeting molecule coupled to an antigen, wherein said APC-targeting molecule is a mutated superantigen having one or more mutations only in its T cell binding site as compared to its wild-type counterpart and wherein the conjugate is capable of binding to a Class II MHC molecule is effective in antigen presentation.
- 3. (Previously Presented) A conjugate according to claim 2, wherein the mutation of the T-cell receptor binding site is a substitution, deletion or addition.
- 4. (Previously Presented) A conjugate according to claim 2, wherein the Tcell binding site of the antigen-presenting cell (APC) targeting molecule has been deleted.
- 5. (Previously Presented) A conjugate according to claim 2, wherein the antigen-presenting cell (APC) targeting molecule is a mutated superantigen of Staphylococcus aureus and/or Streptococcus pyogenes.
- 6. (Previously Presented) A conjugate according to claim 5, wherein the mutated superantigen is a SPE-C mutant.
  - (Cancelled) 7-9.

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10. (Currently Amended) A conjugate according to claim 2, wherein the antigen-presenting- cell (APC) targeting molecule is coupled reversibly to [[an]] the antigen.

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11. (Previously Presented) A conjugate according to claim 2, wherein the antigen is a protein, a polypeptide and/or a peptide.

# 12. (Cancelled)

13. (Previously Presented) A conjugate according to claim 2, wherein the antigen is non-immunogenic when not coupled to the antigen-presenting cell (APC) targeting molecule.

## 14. (Cancelled)

- 15. (Previously Presented) Pharmaceutical composition comprising a conjugate according to claim 2 and a pharmaceutically acceptable carrier, adjuvant, excipient and/or solvent.
- 16. (Previously Presented) Vaccine comprising a conjugate according to claim 2.
- 17. (Withdrawn) Method of therapeutic or prophylactic treatment of a disorder which requires the induction or stimulation of the immune system, comprising the administration to a subject requiring such treatment of an immunomodulator according to claim 2.

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18. (Withdrawn) A method according to claim 17, wherein the disorder is selected from the group consisting of bacterial, viral, fungal or parasitic infection, autoimmunity, allergy and/or pre-neoplastic or neoplastic transformation.

## 19-20. (Cancelled)

- 21. (Withdrawn and Currently Amended) Method of preparing an immunomodulator immunomodulatory conjugate comprising the steps of:
- introducing a modification and/or a deletion into the T-cell binding site of (a) an antigen-presenting cell (APC) targeting molecule which is structurally a superantigen, and
- (b) coupling thereto and immunomodulatory antigen to produce a conjugate. wherein the conjugate is capable of binding to a Class II MHC molecule.
- 22. (Withdrawn) A method according to claim 21, wherein the antigen-presenting cell (APC) targeting molecule is selected from the group of SPE-C, SMEZ and SEA.
- 23. (Withdrawn) A method according to claim 21, wherein the antigen-presenting cell (APC) targeting molecule is SPE-C Y15A R181Q.
- 24. (Withdrawn) A method according to claim 21, wherein the antigen-presenting cell (APC) targeting molecule is designated SPEC-Y15A.C27S.N79C.R181Q.
- 25. (Withdrawn) A method according to claim 21, wherein the antigen-presenting cell (APC) targeting molecule is SPEC (-20-90).

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26. (Withdrawn and Currently Amended) Method of increasing antigenicity of a compound, comprising [[the]] coupling of said compound to an antigen-presenting-cell (APC) targeting molecule to produce a conjugate, wherein said APC[[-]] targeting molecule mimics a superantigen but does not include a fully functional T-cell receptor binding site is a mutated superantigen having one or more mutations only in its T cell binding site as compared to its wild-type counterpart and the conjugate is capable of binding to a Class II MHC molecule.

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# 27. (Cancelled)

- 28. (Withdrawn) A method according to claim 26, wherein the T-cell receptor binding site, or at least a part thereof, of the antigen-presenting-cell (APC) targeting molecule has been modified by substitution or addition.
- 29. (Withdrawn) A method according to claim 26, wherein the T-cell binding site of the antigen-presenting cell (APC) targeting molecule has been deleted.
- 30. (Withdrawn and Currently Amended) A method according to claim 26, wherein the antigen-presenting cell (APC) targeting molecule is derived from a mutated superantigen of Staphylococcus aureus and/or Streptococcus pyogenes.
- 31. (Withdrawn and Currently Amended) A method according to claim 30, wherein antigen-presenting cell (APC) targeting molecule is derived from a mutated SPE-C, SMEZ and/or SEA.
- 32. (Withdrawn) A method according to claim 31, wherein the antigen-presenting cell (APC) targeting molecule is designated SPEC-Y15A as herein defined.

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33. (Withdrawn) A method according to claim 31, wherein the antigen-presenting cell (APC) targeting molecule is designated SPEC-Y15A R181Q.

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- 34. (Withdrawn) A method according to claim 31, wherein the antigen-presenting cell (APC) targeting molecule is designated SPEC-Y15A.C27S.N79C.R181Q
- 35. (Withdrawn) A method according to claim 31, wherein the antigen-presenting cell (APC) targeting molecule is SPEC (-20-90).
- 36. (Withdrawn) A method according to claim 26, wherein the antigen-presenting- cell (APC) targeting molecule is coupled reversibly to said compound.
- 37. (Withdrawn) A method according to claim 26, wherein the compound is selected from the group consisting of a protein, a polypeptide and/or a peptide, a carbohydrate or a nucleic acid.
- 38. (Withdrawn) A method according to claim 26, wherein the compound is non-immunogenic when not coupled to the antigen-presenting cell (APC) targeting molecule.
  - 39. (Cancelled)
- 40. (Withdrawn) The conjugate of claim 6, wherein the SPE-C mutant is SPEC-Y15A.
- 41. (Withdrawn) The conjugate of claim 6, wherein the SPE-C mutant is SPEC-Y15A.R181Q.

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42. (Withdrawn) The conjugate of claim 6, wherein the SPE-C mutant is SPEC-Y15A.C27S.N79C.R181Q.

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- 43. (Withdrawn) The conjugate of claim 6, wherein the SPE-C mutant is SPEC(-20-90).
- 44. (Withdrawn) The conjugate of claim 39, wherein the APC-targeting molecule is a mutated SPE-C, in which the amino acid residue Y15 is mutated.
- 45. (Withdrawn) The conjugate of claim 39, wherein the APC-targeting molecule is a mutated SPE-C, in which the amino acid residue R181 is mutated.